PROMPT -- a) Display the structure of all tables

DESC instructor;

DESC course;

DESC prereq;

DESC department;

DESC teaches;

PROMPT -- b) Display the contents of all tables

SELECT \* FROM instructor;

SELECT \* FROM course;

SELECT \* FROM prereq;

SELECT \* FROM department;

SELECT \* FROM teaches;

PROMPT -- c) Display the name and department of each instructor

SELECT name, dept\_name FROM instructor;

PROMPT -- d) Display the name and salary of Comp. Sci. instructors

SELECT name, salary FROM instructor WHERE dept\_name = 'Comp. Sci.';

PROMPT -- e) Display the records of instructors who belong to the Physics department and get a salary less than 90000

SELECT \* FROM instructor WHERE dept\_name = 'Physics' AND salary < 90000;

PROMPT -- f) Display the name of instructors who do not belong to Comp. Sci. Department

SELECT name FROM instructor WHERE dept\_name != 'Comp. Sci.';

PROMPT -- g) Display distinct department names available in the Instructor table

SELECT DISTINCT dept\_name FROM instructor;

PROMPT -- h) Display all Course\_id‘s taught in Spring semester of 2009

SELECT DISTINCT course\_id FROM teaches WHERE semester = 'Spring' AND year = 2009;

PROMPT -- i) Display course titles taught in Comp. Sci. Department and do not have credits equal to 3

SELECT title FROM course WHERE dept\_name = 'Comp. Sci.' AND credits != 3;

PROMPT -- j) Display all columns of course table sorted in descending order of department names

SELECT \* FROM course ORDER BY dept\_name DESC;

PROMPT -- k) Add a date\_of\_join column to the instructor table

ALTER TABLE instructor ADD date\_of\_join DATE;

DESC instructor;

COLUMN name FORMAT A15

COLUMN dept\_name FORMAT A15

COLUMN date\_of\_join FORMAT A12

SELECT \* FROM instructor;

PROMPT -- l) Insert date values to existing rows (assuming arbitrary dates for example)

UPDATE instructor SET date\_of\_join = TO\_DATE('2005-08-15', 'YYYY-MM-DD') WHERE id = 10101;

UPDATE instructor SET date\_of\_join = TO\_DATE('2008-07-20', 'YYYY-MM-DD') WHERE id = 12121;

UPDATE instructor SET date\_of\_join = TO\_DATE('2006-09-01', 'YYYY-MM-DD') WHERE id = 15151;

UPDATE instructor SET date\_of\_join = TO\_DATE('2004-01-12', 'YYYY-MM-DD') WHERE id = 22222;

UPDATE instructor SET date\_of\_join = TO\_DATE('2007-03-25', 'YYYY-MM-DD') WHERE id = 32343;

UPDATE instructor SET date\_of\_join = TO\_DATE('2009-11-10', 'YYYY-MM-DD') WHERE id = 33456;

UPDATE instructor SET date\_of\_join = TO\_DATE('2010-05-30', 'YYYY-MM-DD') WHERE id = 45565;

UPDATE instructor SET date\_of\_join = TO\_DATE('2011-06-18', 'YYYY-MM-DD') WHERE id = 58583;

UPDATE instructor SET date\_of\_join = TO\_DATE('2012-02-14', 'YYYY-MM-DD') WHERE id = 76543;

UPDATE instructor SET date\_of\_join = TO\_DATE('2003-12-05', 'YYYY-MM-DD') WHERE id = 76766;

UPDATE instructor SET date\_of\_join = TO\_DATE('2014-09-07', 'YYYY-MM-DD') WHERE id = 83821;

UPDATE instructor SET date\_of\_join = TO\_DATE('2015-10-22', 'YYYY-MM-DD') WHERE id = 98345;

COLUMN name FORMAT A15

COLUMN dept\_name FORMAT A15

COLUMN date\_of\_join FORMAT A12

SELECT \* FROM instructor;

PROMPT -- m) Change the name of dept\_name to department in all tables

ALTER TABLE instructor RENAME COLUMN dept\_name TO department;

DESC instructor;

COLUMN name FORMAT A15

COLUMN dept\_name FORMAT A15

COLUMN date\_of\_join FORMAT A12

SELECT \* FROM instructor;

ALTER TABLE course RENAME COLUMN dept\_name TO department;

DESC course;

SELECT \* FROM course;

ALTER TABLE department RENAME COLUMN dept\_name TO department;

DESC department;

SELECT \* FROM department;

PROMPT -- n) Rename the "Prereq" table to "Prerequired"

ALTER TABLE prereq RENAME TO prerequired;

DESC prerequired;

SELECT \* FROM prerequired;

PROMPT -- o) Change Course\_id column name to Sub\_code

ALTER TABLE course RENAME COLUMN course\_id TO sub\_code;

DESC course;

SELECT \* FROM course;

PROMPT -- p) Change the data type of name to varchar(50)

ALTER TABLE instructor MODIFY name VARCHAR2(50);

DESC instructor;

PROMPT -- q) Rename the Instructor table to Faculty\_Info

ALTER TABLE instructor RENAME TO faculty\_info;

DESC faculty\_info;

COLUMN name FORMAT A15

COLUMN department FORMAT A15

COLUMN date\_of\_join FORMAT A12

SELECT \* FROM faculty\_info;

PROMPT -- r) Change the column size of Course\_id in Course table from 10 to 8

ALTER TABLE course MODIFY sub\_code VARCHAR2(8);

DESC course;

PROMPT -- s) Delete the content of the table Prereq along with its description

DELETE FROM prerequired;

SELECT \* FROM prerequired;

DROP TABLE prerequired;

PROMPT -- t) Change the column name ‘Building’ of Department table to ‘Builder’

ALTER TABLE department RENAME COLUMN building TO builder;

DESC department;

SELECT \* FROM department;